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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,588	11/28/2003	Laurence B. Boucher	ALA-025	9422

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EXAMINER	
LIN, WEN TAI	
ART UNIT	**PAPER NUMBER**
2154	

DATE MAILED: 08/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/724,588	BOUCHER ET AL.	
	Examiner	Art Unit	
	Wen-Tai Lin	2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 May 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8,10-14 and 16-42* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8, 10-14 and 16-42* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 3/7/05
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-8, 10-14 and 16-42 are presented for examination.

2. The text of those sections of Title 35, USC code not included in this action can be found in the prior Office Action.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claim 28 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6247060. Although the conflicting claims are not identical, they are not patentably distinct from each other because the sole difference in both cases characterized by the the terms "protocol processing stack" (as cited in the U.S. Patent No. 6247060) and "a central processing unit running protocol processing instructions" (as cited in the instant application) are in fact functionally identical.

Claim Rejections - 35 USC § 102

4. Claims 1-8, 10-14, 16-27, 29-40 and 42 are rejected under 35 U.S.C. 102(e) as being anticipated by Bennett et al.[U.S. Pat. No. 6345302].

5. As to claims 1-3, Bennett teaches the invention as claimed including: a system for communication between a local host and a remote host that are connectable by a network, the system comprising: a communication processing device (CPD) [2000, Fig.3] that is integrated into the local host to connect the network and the local host, said CPD including hardware logic configured to process network packets, and a central processing unit (CPU) [10, Fig.3] running protocol processing instructions in the local host to create a transport layer connection between the local host and the remote host [col.4, lines 44-50], wherein said CPD and said CPU are configured such that a message transferred between the network and the local host is generally processed by said CPD instead of said CPU when said CPD controls said connection [col.4, lines 60-65; col.21, lines 4-37], wherein said hardware logic is configured to process Transmission Control Protocol (TCP) and said transport layer connection is a Transmission Control Protocol (TCP) connection [Abstract].

6. As to claim 4, Bennett further teaches that said CPD is connected to said CPU by a bus [37, Fig.3].

7. As to claim 5, Bennett further teaches that said CPD includes a microprocessor [col.9, lines 37-43].

8. As to claims 6-7, Bennett further teaches that said CPD is connected to an input/output (I/O) controller [col.8, lines 2-11]; .

9. As to claim 8, Bennett teaches that the system further comprises a memory that is disposed in said host and accessible by said CPU and said CPD [e.g., 114, Fig.3].

10. As to claim 10, Bennett further teaches that said CPD is integrated with a peripheral component interconnect (PCI) bridge [e.g., two PCI bridges 9080 are integrated with the network processor in Fig.9].

11. As to claim 11, Bennett further teaches that said CPD is integrated with a memory controller for said CPU [e.g., 926, 928, Fig.9; col.9, lines 44-52].

12. As to claim 12, Bennett further teaches that said CPD is integrated with an I/O controller [e.g., 912, 914, Fig.9] and a memory controller [926, 928, Fig.9] for said CPU.

13. As to claim 13, The system of claim 1, wherein said CPD is connected with an I/O controller that connects said CPD to a memory controller for said CPU [Fig.9; col.24, lines 13-64].

14. As to claim 14, Bennett further teaches that said CPD is connected to a hub interface bus that connects a memory controller to an I/O controller [e.g., 30, Fig.3; col.5, lines 11-18].

15. As to claim 16, Bennett further teaches that said message is received from the network by the local host [col.21, lines 3-37; note that the message in this passage is transferred from the remote node].

16. As to claim 17, Bennett teaches the invention as described in claim 1 including: a system for communication between a local host and a remote host that are connectable by a network, the system comprising:

a communication processing device (CPD) that is integrated into the local host to connect the network and the local host, said CPD including hardware logic configured to process network packets, and a central processing unit (CPU) running protocol processing instructions in the local host to create a transport layer connection between the local host and the remote host, wherein said CPD and said CPU are configured such that a packet transferred between the network and the local host is processed by said CPD and not by said CPU when said CPD controls said connection [Figs. 3 & 9; col.4, lines 60-65; col.21, lines 4-37; Abstract; Note that the TCP acknowledgement packet is independently prepared by the CPD without CPU's involvement].

17. As to claims 18-27 and 29-40, since the features of these claims can also be found in claims 1, 4-6, 8, 10-14 and 16-17, they are rejected for the same reasons set forth in the rejection of claims 1, 4-6, 8, 10-14 and 16-17 above.

18. As to claim 42, Bennett further teaches that said second network packet is received from the network by the local host [i.e., as described in the comments relating to the rejection of claim 17, in a similar manner a remote node may send an acknowledgement signal, which is received by the local CPD without involvement of the local CPU].

Claim Rejections - 35 USC § 103

19. Claims 28 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett et al.(hereafter "Bennett")[U.S. Pat. No. 6345302], as applied to claims 1-8, 10-14, 16-27, 29-40 and 42 above, further in view of Jolitz et al.(hereafter "Jolitz")[U.S. Pat. No. 6173333].

20. As to claim 28, Bennett does not specifically teach using an ownership bit disposed in the local host to designate whether said CPU or said CPD controls said connection.

However, in the same field of endeavor, Jolitz teaches a bypass mechanism for incoming/outgoing TCP/IP packets to bypass a TCP/IP accelerator under various conditions such as [e.g., col.5, lines 44-53; col.6, lines 1-8].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement a bypass route for Bennett's network processor for non-TCP/IP packets (or when the network processor is unavailable) because Bennett's network processor is dedicated

for portions of TCP/IP processing and the bypass route would facilitate the CPU's take over of the entire TCP/IP processing.

21. As to claim 41, since the features of this claim can also be found in claims 17, 28 and 30, it is rejected for the same reasons set forth in the rejection of claims 17, 28 and 30 above.

22. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Connery et al. [U.S. Pat. No. 5937169].

23. Applicant's arguments with respect to claims 1-8, 10-14 and 16-42 on 5/26/2005 have been considered but are moot in view of the new ground(s) of rejection.

24. A shortened statutory period for response to this action is set to expire 3 (three) months and 0 days from the mail date of this letter. Failure to respond within the period for response will result in ABANDONMENT of the application (see 35 U.S.C. 133, M.P.E.P. 710.02, 710.02(b)).

Conclusion

Examiner note: Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially

teaching all or part of the claimed invention, as well as the contest of the passage as taught by the prior art or disclosed by the Examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wen-Tai Lin whose telephone number is (571)272-3969. The examiner can normally be reached on Monday-Friday (8:00-5:00) .

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571)272-3964. The fax phone numbers for the organization where this application or proceeding is assigned are as follows:

(571) 273-8300 for official communications; and

(571) 273-3969 for status inquires draft communication.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Wen-Tai Lin

August 3, 2005

Wen-Tai Lin
8/3/05